Bandolier 116

Independent evidence-based health care

On being little

Roman augurs never had it like this. They could tear the entrails out of a chicken and make of it what they liked, or perhaps what they were paid to make out of it. After all, taking the auspices was one thing, what happened was another, and if the two did not match someone else was to blame for offending the gods.

One of the classic problems with evidence is when there's not much of it, and we have to tease out what it means. The trouble is we are not allowed to guess. We have to get it right. So this month we concentrate on looking at little amounts of evidence.

Three meta-analyses, of treatments for impetigo, methylxanthines for COPD exacerbations, and trazodone for erectile dysfunction make the training ground. One confirms us in our beliefs, though it appals us that there is so little evidence for treatments used so often. One shows that guidelines can be wrong, and that a treatment probably does more harm than good. One teases us with suggestions of efficacy, but only in some, and then perhaps.

And that is what it is often like, taking the auspices from too little information. We have, in the end, to make much from little.

On drawing a line

Another venture into homeopathy, with a systematic review of systematic reviews. Homeopathy doesn't work. It is time to draw the line. Some will call for more trials, but ***Bandolier*** cannot see why its taxes should pay. Surveys show that huge amounts of money are taken from the public for alternative therapies with little or no evidence. Make them pay, as happened in Holland where a "loser pays" deal was struck.

And they will. Hail the manufacturer of magnetic insoles for foot pain that funded a randomised trial showing that they were no better than non-magnetised insoles. Don't weep. The US public spend $500 million a year on magnetic products for pain.

On the net

Additional things on the Internet to be downloaded include an essay on needlestick injuries, and a primer on calculating NNTs.

Treatments for impetigo

Impetigo is a common bacterial skin infection that affects about 1 in 35 of under-4s and 1 in 60 of under-15s each year. Treatment options vary. They include topical and oral antibiotics, antifungals, perhaps with steroids, and some treatments that are less conventional. The situation is complicated by diagnosis, extent of affected skin, and outcome. A new systematic review [1] shows us that there is limited clinical information, but does a great job of making sense of it.

Systematic review

The search strategy was sensitive and extensive, examining six databases, including the Cochrane Library, as well as evidence from other sources. The authors also asked pharmaceutical companies for any additional published or unpublished trials.

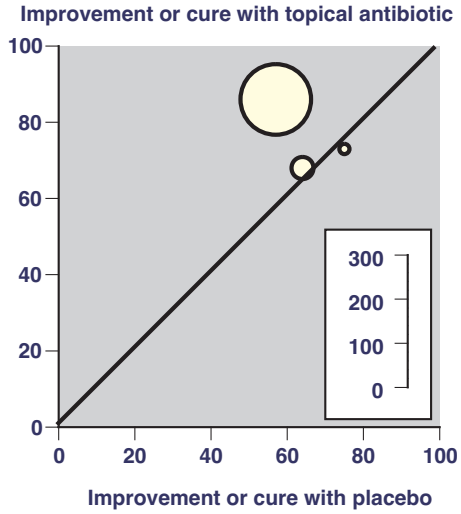
For inclusion studies had to be randomised double blind trials for bullous or non-bullous impetigo, irrespective of the extent of the disease. The outcome was cure or improvement of the condition within seven to 14 days. Patient selection by skin swab or other bacteriological testing was an exclusion criterion.

Results

There were 16 studies included in the review, all published. Most of the studies were of high reporting quality, minimising possibility of bias. There were three main groups of comparisons: topical antibiotics versus placebo, topical antibiotic versus oral erythromycin, and a comparison of two different topical preparations. These 10 trials had 664 patients treated with topical antibiotic, 119 with placebo and 96 with oral antibiotic.

In this issue

Figure 1: Topical antibiotics vs placebo for impetigo



Topical antibiotic vs placebo

There were three trials (Figure 1, Table 1). Topical antibiotic produced 81% cures or improvements at 7-14 days, significantly more than with topical placebo (61%). The number needed to treat to produce an additional patient cured or improved at 7-14 days was 5 (95%CI 3.2 to 11).

Topical antibiotic vs oral antibiotic

Three trials compared topical antibiotic with oral erythromycin (Table 1). Topical antibiotic produced 87% cures or improvements at 7-14 days, significantly more than with oral erythromycin (75%). The number needed to treat to produce an additional patient cured or improved at 7-14 days was 9 (95%CI 4.4 to 194). This may not be a robust conclusion for two reasons. First the numbers are small, and different calculations can show a non-significant difference. Moreover, the authors omitted one small study that showed better results with another oral antibiotic.

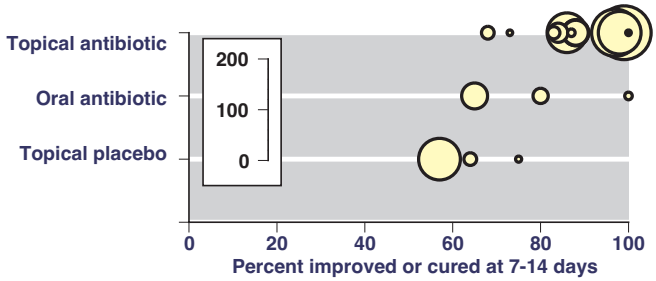
Mupirocin vs fusidic acid

Four trials compared topical mupiricin with topical fusidic acid. Both had cure or improvement rates of over 90% (Table 1) and there was no difference between them.

Comment

Topical antibiotics are better than placebo at producing a cure or improvement at 7-14 days in patients with impetigo, and are probably at least as good as oral antibiotics. Rates

Figure 2: Treatments arms compared



were higher for topical antibiotics if all the arms of the trials are gathered together (Figure 2). Overall 91% of patients treated with topical antibiotics were improved or cured, 75% with oral antibiotics, and 61% with topical placebo.

So what should we think of the information to hand? The authors make a sensible comment, that while trials were generally well reported, with adequate scores for reporting quality, the design of most of the included trials was less than adequate, with considerable clinical heterogeneity in outcomes used and description of the extent of impetigo at the start of treatment. Moreover, the 16 included trials came from 359 studies examined, almost all of which were excluded because of fundamental flaws like lack of randomisation or blinding.

Studies were also small, so though we have 16 studies, we have only a handful of patients on particular treatments. This means we cannot say whether topical antibiotics are better than oral antibiotics, or which of either is best. It makes us think about our lack of knowledge, and is a pointer for the type of study needed to be done within the NHS to provide clear clinical guidelines.

And it makes us think about the outcomes and NNTs. With topical placebo the improvement or cure rate was 60%. This suggests that the outcome used is not sensitive. To determine any real differences between treatments we need a much better outcome with a higher hurdle for efficacy. If 60% of people get better anyway, that leaves room for only 40% to be cured with treatment. If they were all so cured, the best NNT would be 100/40, or 2.5.

What this little review does is to do what all systematic reviews should do, not just dig around in the medical archaeology, but give us a vision of what we need to do to get better. Here it is simple: more, better, and bigger trials.

Reference:
1 A George, G Rubin. A systematic review and meta-analysis of treatments for impetigo. British Journal of General Practice 2003 53: 480-487.

Table 1: Results of comparisons with topical antibiotics for impetigo

Comparison		Number of trials	Improved/total (%)		Relative benefit (95%CI)	NNT (95%CI)
Treatment 1	Treatment 2		Treatment 1	Treatment 2		
Topical antibiotic	Placebo	3	92/114 (81)	72/119 (61)	1.2 (1.1 to 1.6)	5.0 (3.2 to 11)
Topical antibiotic	Oral antibiotic	3	78/90 (87)	72/96 (75)	1.2 (1.01 to 1.3)	9 (4.4 to 194)
Topical mupirocin	Topical fusidic acid	4	227/236 (96)	189/204 (93)	1.0 (0.98 to 1.09)	not calculated

Methylxanthines for COPD

Use of methylxanthines (oral theophylline, intravenous aminophylline or doxofylline) is recommended for consideration in addition to bronchodilators for severe exacerbations of COPD. An answer to the simple question of whether they work comes from a systematic review and meta-analysis [1].

Systematic review

Reviewers searched four electronic databases, including the Cochrane Library, as well as hand-searching 20 respiratory journals. Included were randomised studies comparing methylxanthine with placebo for exacerbations of COPD. Patients had to have known COPD with an exacerbation requiring admission to hospital or emergency care. Treatment had to occur in the emergency department or immediately on admission to hospital. Outcomes of interest were lung function tests, admission to hospital or readmission, and adverse events.

Results

There were four studies included in the review, with information on 169 patients. Three studies were published in full and one was available as an abstract. For two of the studies, authors provided additional information. The studies were of high reporting quality, minimising the possibility of bias. Three trials tested intravenous aminophylline and one oral theophylline, all added to standard treatments.

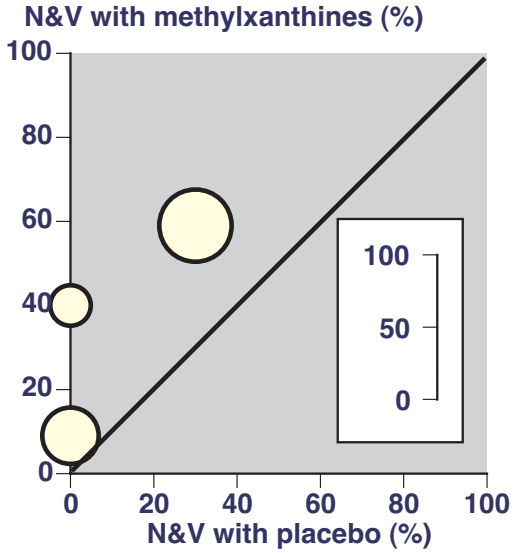
Efficacy

There were no substantial or convincing benefits for any clinical outcomes, including lung function tests, symptom scores, or emergency department return within one week.

Adverse events

Results for the adverse events of nausea and vomiting, tremor, and palpitations or arrhythmias are shown in Table 1. For each event the incidence was higher with methylxanthines than for placebo, but was statistically significant only for nausea and vomiting, where 37% of patients had this adverse event with methylxanthines, and 13% with placebo (Figure 1). The number needed to harm was 4.6 (95%CI 2.6 to 12), meaning that one additional patient would suffer nausea and vomiting for every five treated.

Figure 1: Nausea and vomiting



Comment

The simple conclusion is that, on the limited evidence available, methylxanthines produce no convincing benefit for treating exacerbations of COPD, but they do produce additional harm. Clearly there are limitations here, the obvious one being that with so few patients in trials there might be a small benefit that larger studies might uncover.

Yes, but. That but is the big one. The evidence we have suggests that any limited benefit there may be would be at the risk of significant harm. The ethics of additional research in this area would make for an interesting discussion.

There are two interesting points from this meta-analysis of small studies. The first is that several important guidelines for treating COPD include methylxanthines, while at least one in the USA does not. The review should thus help guideline makers amend their advice.

The second is apparently trivial, but actually quite important. There are several simple numerical errors in this paper. They do not affect the result, although there is an interesting forensic exercise in determining that to be the case. It would make it a useful teaching paper in critical appraisal to demonstrate that we need to be hawk-eyed when reading papers even in the most prestigious journals.

References:

1 RG Barr et al. Methylxanthines for exacerbations of chronic obstructive pulmonary disease: meta-analysis of randomised trials. BMJ 2003 327: 646-651.

Table 1: Results for adverse events of methylxanthines compared with placebo as adjunct treatment for COPD exacerbation

Adverse event	Number of trials	adverse event/total (%)		Relative risk (95%CI)	NNH (95%CI)
		Methylxanthine	Placebo		
Nausea/vomiting	3	24/65 (37)	7/52 (13)	2.6 (1.4 to 5.1)	4.6 (2.6 to 12)
Tremor	3	27/65 (42)	17/52 (33)	1.3 (0.9 to 2.0)	not calculated
Palpitations/arrhythmias	2	9/50 (18)	2/39 (5)	3.6 (0.9 to 15)	not calculated

Trazodone for erectile dysfunction

A number of reviews about male sexual dysfunction mention the use of trazodone for maintaining erections. Many Internet sites about male sexual dysfunction also mention trazodone as a specific treatment, and some give it as much weight as treatments like sildenafil and the newer phosphodiesterase inhibitors. It is clearly important to have a variety of possible treatments, especially as erectile dysfunction may have several causes. A systematic review [1] informs us how little we actually know about trazodone for this indication.

Systematic review

Searching included MEDLINE, the Cochrane Library and specialised registries of trials. For inclusion trials had to include men with erectile dysfunction and be randomised trials comparing trazodone with placebo or other control, have outcomes related to erectile dysfunction and last at least one week. The primary outcome was successful sexual intercourse attempts.

Results

Five trials with 240 men reported trazodone therapy compared with placebo. The dose of trazodone was 50 mg daily in one trial, and 150-200 mg daily in the other four. Duration was four weeks in four trials and 13 weeks in one. Two studies were from Turkey, and one each from Holland, Belgium and the USA. Most men in the trial had erectile dysfunction of three to six months' duration.

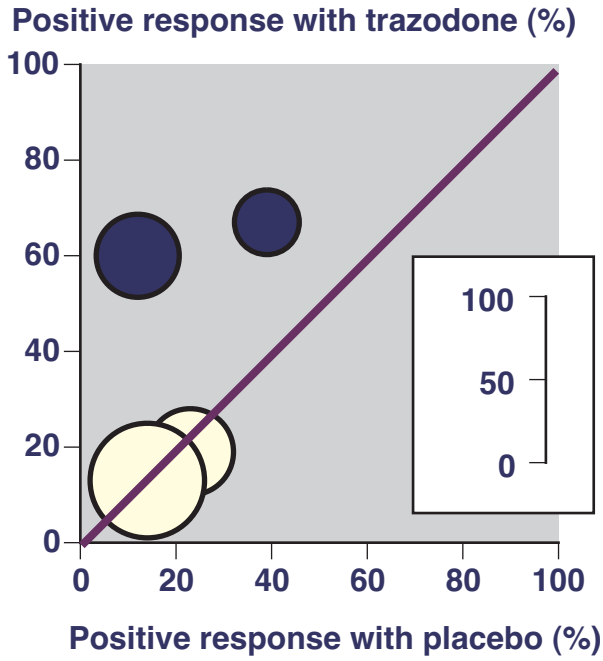
Four trials had outcomes, but only one of these had the primary outcome the authors sought, of successful sexual intercourse attempts. The other three had less well defined outcomes for improvement.

The results are shown in Figure 1. Overall, with trazodone 38/104 men (37%) improved, compared with 21/106 men (20%) improved with placebo. The results were better for the two trials (dark symbols in Figure 1) in which men had psychogenic erectile dysfunction, than in the two trials (light symbols) in which the erectile dysfunction had a physiological or mixed aetiology.

The authors of the paper decided a priori that the data were clinically heterogeneous, and used a random effects calculation for statistical significance. This concluded that overall there was no statistical improvement with trazodone (relative benefit 1.6; 95%CI 0.8 to 3.3). A less conservative approach using a fixed effects calculation would have shown statistical significance.

For the two studies in men with psychogenic erectile dysfunction, the effect of trazodone again just about touched statistical significance, with 63% of men with benefit with trazodone and 23% with placebo. The numbers were small (89 men in two trials), but the effect was large, with an imputed NNT of about 2.5.

Figure 1: Positive response to treatment with trazodone and placebo



Adverse events

Adverse events were more frequent with trazodone than with placebo, but failed to reach statistical significance for any one adverse event. Sedation and dry mouth were common, and there was one case of priapism with trazodone. Adverse events or all-cause discontinuations were the same for both trazodone and placebo, at about 9%.

Comment

We have here a nicely done review that leaves us without a definite conclusion because the information it found was just not good enough. The trials were small. They recruited men with different aetiology for their erectile dysfunction. The outcomes were poorly defined, especially given what we have come to expect from modern research into erectile dysfunction. Trials were also generally of short duration.

The best we can say is that we don't know enough. The next best is that we have a hint, and no more than a hint, that trazodone may be useful in men with erectile dysfunction of psychogenic aetiology.

What we have is a nice example of what happens in the early stages of a therapy being used for a different indication. Trials are small and the questions posed and answers obtained are diffuse. There is some evidence, and there may even be a biology, as priapism is a known rare adverse effect of trazodone. What we do not have is enough evidence to make unequivocal decisions. How this limited evidence can be used is simple. With much caution and after a great deal of thought, and for specific reasons in specific patients, or perhaps not at all until better evidence is available.

Reference:
1 HA Fink et al. Trazodone for erectile dysfunction: a systematic review and meta-analysis. BJU International 2003 92: 441-446.

Magnetic insoles for foot pain

Here's a neat conversation piece. How much is spent in the USA every year on magnetic devices to treat pain? Answer is $500 million, with a total worldwide market to date above $5 billion. To put that into some sort of perspective, that $500 million is just half the annual sales that the pharmaceutical industry defines as a "blockbuster".

And what do you think is the evidence for magnets affecting pain? You guessed it. None. There is a trial in a Cochrane review of interventions for plantar heel pain [1], and that was negative, and poor. A new, well-conducted, randomised trial provides a powerful negative, and a great example of trial design.

Randomised trial

The trial was conducted in patients responding to an advertisement for people with foot pain for at least one month, present on more days than not, and aggravated by standing or walking. For inclusion people had to be over 18 years, with pain of at least moderate intensity, and characteristics of plantar heel pain on examination. Exclusions were sensible, especially possible participants with other diagnoses.

Magnetic and non-magnetic insoles were identical in appearance and manufacture, and were cushioned soles with embedded foil which was either magnetised or not magnetised. The manufacturer provided insoles using a random tracking code, and they were then mixed in a large box.

Participants were asked to use the insoles for at least four hours a day for at least four days a week for eight weeks. Information was collected at baseline, and at four and eight weeks. Outcomes were pain, response to treatment, and other outcomes using diaries to record hours that insoles were worn, and daily pain intensity.

Results

Randomised were 101 patients, 57 with magnetised and 44 with non-magnetised insoles. Six were lost to follow up, three in each group. Use of insoles was above 80%. At baseline patients in the two groups were very similar. Current treatments included use of NSAIDs or paracetamol in 60-70%, but also ice, elevation, stretching and massage.

Figure 1: Pain scores over eight weeks

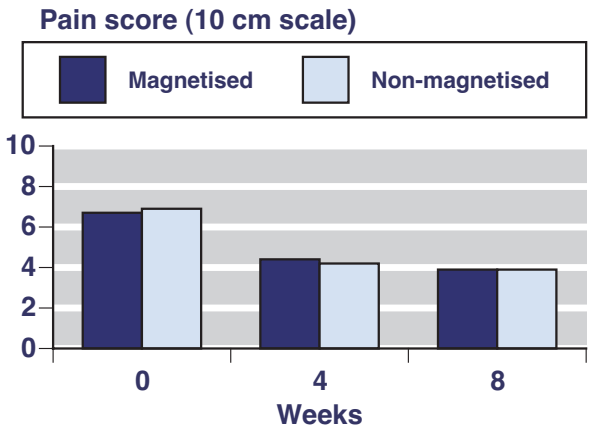
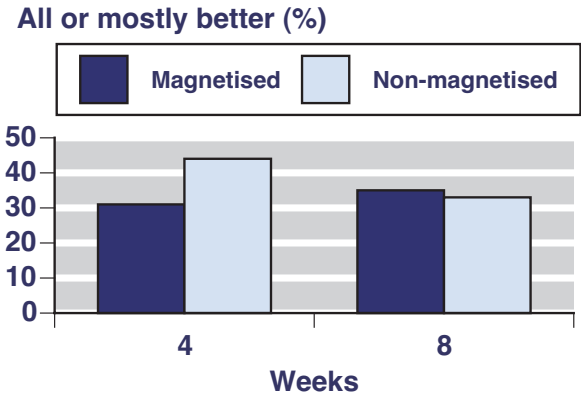


Figure 2: Patients all or mostly better at 4 and 8 weeks



There was a fantastic reduction in morning pain intensity with the magnetised insoles (Figure 1). Unfortunately there was exactly the same reduction with placebo. The proportions of patients who felt all or mostly better at four and eight weeks were the same with magnetised and non-magnetised insoles (Figure 2).

There were no other differences between magnetised and non-magnetised insoles. About half in each group guessed correctly which insole they had, so blinding was maintained. Insoles were checked to ensure that they were correctly magnetised. Belief or non-belief in the utility of magnetised insoles made no difference to the result.

Comment

A beautiful study demonstrating pretty conclusively that magnetised insoles do not help plantar heel pain. It is another example showing that with complementary therapies, the better the trial, the more negative the result.

The manufacturer of the insoles funded the study, which was brave of them. They might want to take away that perhaps it was the use of the insoles, rather than the magnetic field from them, that helped. Figure 1 certainly seems to show that. The trouble is that patients may have entered the trial because, in a chronic fluctuating disorder, the pain was particularly bad at the time. If it then got better because it was fluctuating, reduced pain is just what would be expected.

There is also a complex philosophical question. We protect people from ineffective and unsafe chemicals, but we do much less for crackpot devices. OK, we don't know that magnetised insoles are unsafe, but no woman who could possibly be pregnant could be enrolled in the trial. And isn't parting with $500 million for no benefit an adverse event of a sort? ***Bandolier*** could find useful and interesting things to do if anyone has the odd $500 million going spare, and we wouldn't turn our nose up at smaller amounts, either.

References:

1 Crawford F, Thomson C Interventions for treating plantar heel pain. In: The Cochrane Library, Issue 3, 2003. Oxford: Update Software

2 MH Winemiller et al. Effect of magnetic vs sham-magnetic insoles on plantar heel pain. A randomised controlled trial. JAMA 2003 290: 1474-1478.

Where doctors get information

Where do doctors go to get their information? Lots of places – print, colleagues, meetings, lectures, Internet, and others. Part of the problem doctors face is the huge amount of stuff being produced. More and more randomised trials and systematic reviews. Together with other papers on basic science and observational studies, it is just too much to keep track of.

Doctors and others have to have a strategy that works for them, depending on where they are. Some places will be so computerised that nothing ever goes on paper. Some will still be using a fountain pen. Often the two will be side by side. A systematic review [1] tells us that, for the time being at least, papers seems to be king.

Systematic review

A wide strategy was set up to look at several electronic databases for papers examining information-seeking behaviour in doctors. Studies had to explicitly or implicitly define information need as medical information, rather than some other form of information. Authors were contacted to seek information about other, unpublished, studies. If the instrument used in data collection was piloted before use, or otherwise independently examined, it was regarded as validated.

Results

There were 19 papers published between 1978 and 2001, using questionnaires, or interviews, or both. Most involved doctors in primary care, mostly in the USA. Random sampling was used in eight studies. The median response rate was 80%.

Paper (books, papers, desk references) was the main source of information in 13 studies, colleagues were the main source in four, and one (published in 1996) found electronic sources to be the main source. There was no change over time.

Figure 1 shows the percentage of doctors using print sources. Most showed print sources to be used by over 50% of doctors. Figure 2 shows the percentage using colleagues. Most showed colleagues to be used by under 40%.

Comment

Not much recent information from outside the USA. In Britain and other countries with large socialised healthcare systems, it seems a little odd that no-one has bothered to find out how the main consumers of medical information behave in order to get that information.

Actually, it is more than a little odd, it is a major omission. Yet it would be reasonably simple to obtain, in order that information could be better targeted. Here is a challenge for information professionals and young doctors who would like a quick paper for their CVs. We want to know what doctors do to access information, what they want, and what are the major barriers preventing information seeking. What is the impact of those evidence sources that are now available? Do bright young doctors with IT skills do better?

The authors of the review are in no doubt that convenience of access, reliability and high quality, quick use, applicability and habit make information seeking likely to occur and be successful. Lack of time, the huge amount of material and forgetfulness hinder the process. This means that perhaps only one question in three or four gets followed up. Making it easier and better could improve this, and help doctors (and other professionals) use good evidence more.

Reference:
1 M Dawes, U Sampson. Knowledge management in clinical practice: a systematic review of information seeking behaviour in physicians. International Journal of Medical Informatics 2003 71: 9-15.

Figure 1: Doctors' use of print sources

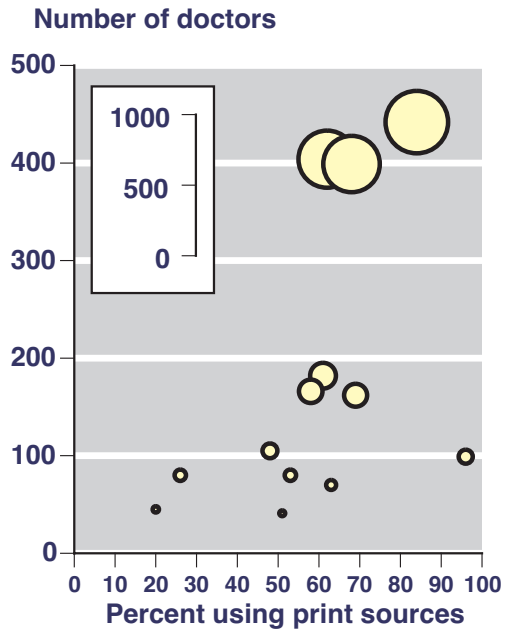
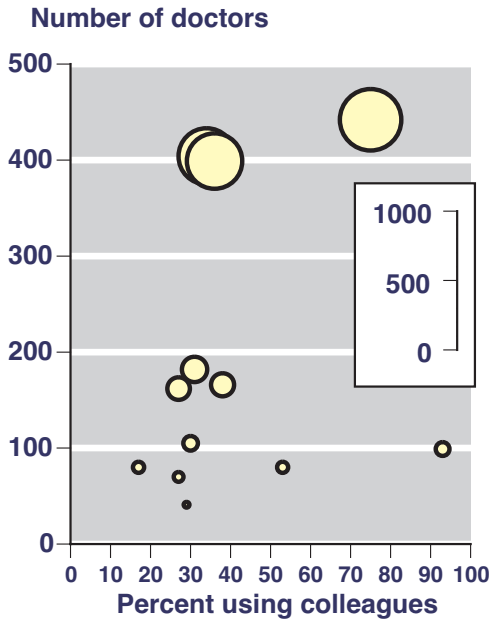


Figure 2: Doctors' use of colleagues



Reporting RCTs

Randomised trials are the gold standard for evaluating treatment efficacy. How the results are reported may alter how we judge the magnitude or importance of the results of a particular trial. We know that relative risk reduction tends to make us use less conservative judgements than absolute risk reduction, or the number needed to treat. So how do trials report their results? Not great, but getting better seems to be the answer [1].

Study

Five major English-language general medical journals (Annals of Internal medicine, BMJ, Lancet, JAMA and New England Journal) were examined for the years 1989, 1992, 1995 and 1998. The start year of 1989 was chosen because it was the year after the original publication suggesting that NNTs may be preferable to other ways of describing results of research.

All issues of each journal were examined for studies reporting a randomisation process, with binary outcomes, and with a statistically significant treatment effect.

Results

Three hundred and fifty nine articles were examined and met the inclusion criteria. NNT was reported in eight articles and absolute risk reduction in 18 (Table 1). Most of these were in papers published in 1998.

Background

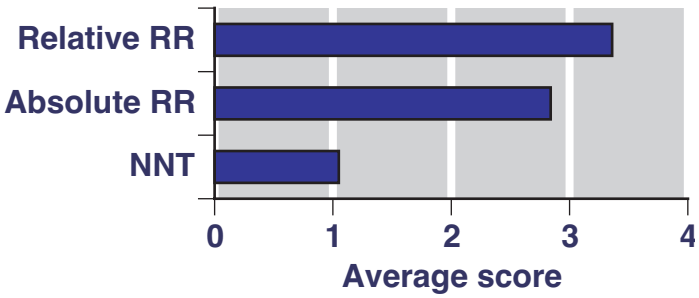
We know that reporting outcomes as relative risk reduction (or increase) can mislead [2]. David Naylor and colleagues [2] compared clinicians' ratings of therapeutic effectiveness by looking at different end-points presented as percent reductions in relative risk, absolute risk, and numbers-needed-to-treat. The study was conducted using random allocation of questionnaires using relative data or absolute data, each with NNT, among doctors of various grades at Toronto teaching hospitals. They used an 11-point scale anchored at "no effect" and running from -5 "harmful" to +5 "very effective".

Relative presentation consistently showed a tendency to higher scores - that is the intervention was interpreted as being more effective (Figure 1). Where data from a single end point, any myocardial infarction, was examined, both relative and absolute comparison was scored consistently higher than NNT presentation of the same data. NNT reporting of the same information produced a reduction of about two points in the effectiveness scale, reducing the judgement from quite effective to one of only slight effect. Subsequent studies generally confirm this [3, 4].

Table 1: RCTs reporting results as NNT or ARR

Year	Total RCTs	NNT	ARR
1989	55	0	0
1992	91	1	3
1995	93	1	5
1998	96	6	10

Figure 1: Scoring effectiveness on "any myocardial infarction" by method of presentation



Comment

Efforts to improve the reporting of randomised trials include the CONSORT statement, published in 1996 and updated subsequently. It is not alone. We also have the QUOROM statement about reporting systematic reviews and meta-analyses, MOOSE for meta-analysis of observational studies, and STARD for reporting studies of diagnostic accuracy. These can all be found in one place, the CONSORT website (http://www.consort-statement.org/). A CONSORT revision in 2001 encouraged the reporting of absolute values and NNT.

Bandolier is awed by the hard work and thoughtfulness of the good folk who prepare these guidelines. ***Bandolier*** may not be in complete agreement with all the points in all the statements, but those are pointy-headed academic quibbles. There is little point in publishing reports of trials if ordinary folk like us cannot understand those results. As it is, clinical trials tend to be read less often than narrative reviews [5]. There is a hint that things are getting better (Table 1), and anecdotally NNTs seem to be appearing more often. In the meantime we will have to learn how to make results of research useful and meaningful ourselves. We need useful, understandable, and meaningful results.

References:

1 J Nuovo et al. Reporting number needed to treat and absolute risk reduction in randomised controlled trials. JAMA 2002 287: 2813-2814.

2 CD Naylor et al. Measured enthusiasm: does the method of reporting trial results alter perceptions of therapeutic effectiveness? Annals of Internal Medicine 1992 117: 916-921.

3 M Bobbio et al. Completeness of reporting trial results: effect on physicians' willingness to prescribe. Lancet 1994 343: 1209-1121.

4 T Fahey et al. Evidence-based purchasing: understanding results of clinical trials and systematic reviews. BMJ 1995 311: 1056-1060.

5 YK Loke, S Derry. Does anybody read "evidence-based" articles? BMC Medical Research Methodology 2003 3:14.

Homeopathy: systematic review of systematic reviews

Bandolier once got a bit hot under the collar about a meta-analysis of homeopathy that concluded that it worked. The problem was that trials were small, there were 24 clinical categories, four types of homeopathy, and 50 classes of homeopathic remedy. Low quality trials were included. The authors themselves concluded that "we found insufficient evidence from these studies that homeopathy is clearly efficacious for any single clinical condition". A systematic review of systematic reviews agrees with that conclusion [1].

Systematic review

Extensive literature searches, including specialist databases, was for systematic reviews of homeopathic treatments. Only systematic reviews of controlled trials were used.

Results

There were six re-analyses of the original meta-analysis. These showed that more rigorous study design was associated with less effect, making the overall effect insignificant.

A further 11 systematic reviews published between 1997 and 2001 were located. They were carried out in different conditions with different homeopathic remedies. Conditions included postoperative ileus, delayed onset muscle soreness, migraine, influenza, asthma, rheumatic conditions and osteoarthritis. The number of patients for each condition was as small as 150 and as large as 3,400.

None of these systematic reviews provided any convincing evidence that homeopathy was effective for any condition. The lesson was often that the best designed trials had the most negative result, as reported in ***Bandolier*** 46.

Comment

We should not be surprised. Even ardent proponents of homeopathy who have performed a critical overview conclude that homeopathy "should not be substituted for proven therapies" [2].

Much of the argument about homeopathy ends up being about trivial differences of little or no clinical relevance. Until large and well conducted randomised trials tell us differently, the conclusion is that homeopathy does not work, and its use instead of remedies of proven effectiveness is not a matter of trivial implication. Members of the public are relieved of much money each year by homeopaths. There's little evidence they are relieved of any suffering.

Reference:
1 E Ernst. A systematic review of systematic reviews of homeopathy. British Journal of Clinical Pharmacology 2002 54: 577-582.
2 WB Jonas et al. A critical overview of homeopathy. Annals of Internal Medicine 2003 138: 393-399.

Book review

Drugs for Bugs. PD Baker, CT Hoey, BA Lipsky. Lippincot Williams & Wilkins 2003. ISBN 0-7817-4197-1. 212 pp, $12.95 (www.LWW.com).

This is a small, palm-sized book written as a guide to outpatient antimicrobial treatment in a US context. The idea is to allow clinicians to find appropriate antibiotic therapy for common disorders quickly, and with information on contraindications, adverse effects and dosing. It starts at the head and goes down to the feet.

What is good is that it succeeds in what it aims to do. Additionally, it tells us in the preface that its recommendations are as evidence-based as possible, though it does not give the references to save space.

Because of the US base of the authors (in and around Puget Sound in Washington State), for a British audience there will be a few important differences. For instance, cotrimoxazole is not frequently used in the UK, though recommended in this book for dog bites. Similarly, mupirocin is recommended for impetigo, though resistance to this is increasing in the UK.

For some who want to know more, the absence of references will be a difficulty. Pity the authors could not have put these up on an Internet site, for instance. Nor is antibiotic resistance covered, and some hints in a small section might have been helpful. And there will be places around the world where meningitis might be seen as worth a mention in a book even for outpatient use. A universal treatise with all references would be a tome, though, not a palm-sized ready helper. You just can't have everything.

Subscribing to Bandolier

For your own copy:

Download a subscription form from the Internet (www.jr2.ox.ac.uk/bandolier/backnos.html) and fax it to Maura Moore on +44 1865 226978

Contact Maura for a subscription form by telephone (+44 1865 226132), fax (+44 1865 226978), or by email to maura.moore@pru.ox.ac.uk

Subscription rates are £36 in the UK and £72 overseas.

EDITORS

Andrew Moore Henry McQuay
Pain Relief Unit
The Churchill, Oxford OX3 7LJ
Editorial office: 01865 226132
Editorial fax: 01865 226978
Email: andrew.moore@pru.ox.ac.uk
Internet: www.ebandolier.com
ISSN 1353-9906